REMARKS

The Examiner is respectfully requested to consider and to enter the above amendments. The specification has been amended to correct a typographical error.

Summary

It is respectfully submitted that claims 1-7 and 21-43 are in condition for allowance, and notification to that effect is earnestly solicited. The Examiner is invited to contact Applicants' Representative at (206) 402-6540, if it is believed that prosecution of this application may be assisted thereby.

Respectfully Submitted,

Brian J. Walsh
Registration No. 45,543

Enclosures:
Express Mail Certificate
Filing Under 37 C.F.R. §1.53(b) (in duplicate)
Patent Application (87 pages)
Figures (2 sheets of drawings)
Unexecuted Combined Declaration and Power of Attorney
Sequence Listing (33 pages)
Sequence Listing Diskette
Preliminary Amendment and accompanying Appendix A
Postcard

APPENDIX A – SPECIFICAION AMENDMENTS WITH NOTATIONS TO INDICATE CHANGES MADE
Applicant(s): Adler et al.
File No. 97-44D1
For: NOVEL BETA-DEFENSINS

Amendments to the following are indicated by underlining what has been added and bracketing what has been deleted. Additionally, all amendments have been shaded.

In the Specification

The paragraph beginning at page 1, line 8, under the heading "REFERENCE TO RELATED APPLICATIONS" has been amended as follows:

[This] The present application is a divisional application of U.S. Patent Application Serial No. 09/636,399, filed August 10, 2000, which is a continuation-in-part of U.S. Patent Application No. 09/344,097, filed on June 25, 1999, which is a continuation-in-part of U.S. Patent Application No. 09/150,786, filed on September 10, 1998, which is related to Provisional Applications 60/058,335, filed on September 10, 1997 and 60/064,294, filed on November 5, 1997, all of which are herein incorporated by reference. Under 35 U.S.C. §119(e)(1), this application claims benefit of said Provisional Applications.

The paragraph beginning at page 3, line 36, has been amended as follows:

Within one aspect the invention provides an isolated protein comprising a polypeptide that is at least 80% identical to a polypeptide selected from the group consisting of: a) a polypeptide having the sequence of amino acid residue 1 to amino acid residue 65 of SEQ ID NO:2; b) a polypeptide having the sequence of amino acid residue 19 to amino acid residue 65 of SEQ ID NO:2; c) a polypeptide having the sequence of amino acid residue 21 to amino acid residue 65 of SEQ ID NO:2; d) a polypeptide having the sequence of amino acid residue 1 to amino acid residue 67 of SEQ ID NO:10; e) a polypeptide having the sequence of amino acid residue 21 to amino acid residue 67 of SEQ ID NO:10; and f) a polypeptide having the sequence of amino acid residue 23 to amino acid residue 67 of SEQ ID NO:[2]10; wherein the polypeptide has cysteine residues corresponding to amino acid residues

33, 40, 45, 55, 62 and 63 of SEQ ID NOs:2 or 10. Within one embodiment the protein comprises a polypeptide having the sequence selected from the group consisting of: a) a polypeptide having the sequence of amino acid residue 1 to amino acid residue 67 of SEQ ID NO:10; b) a polypeptide having the sequence of amino acid residue 21 to amino acid residue 67 of SEQ ID NO:10; and c) a polypeptide having the sequence of amino acid residue 23 to amino acid residue 67 of SEQ ID NO:10.

The paragraph beginning at page 5, line 14, has been amended as follows:

Within another aspect is provided an isolated polynucleotide molecule encoding a protein, the polynucleotide molecule consisting of a coding strand and a complementary non-coding strand, wherein the polynucleotide molecule encodes a polypeptide that is at least 80% identical to the amino acid sequence to a polypeptide selected from the group consisting of: a) a polypeptide having the sequence of amino acid residue 1 to amino acid residue 65 of SEQ ID NO:2; b) a polypeptide having the sequence of amino acid residue 19 to amino acid residue 65 of SEQ ID NO:2; c) a polypeptide having the sequence of amino acid residue 21 to amino acid residue 65 of SEQ ID NO:2; d) a polypeptide having the sequence of amino acid residue 1 to amino acid residue 67 of SEQ ID NO:10; e) a polypeptide having the sequence of amino acid residue 21 to amino acid residue 67 of SEQ ID NO:10; and f) a polypeptide having the sequence of amino acid residue 23 to amino acid residue 67 of SEQ ID NO:[2]10; wherein the polypeptide has cysteine residues corresponding to amino acid residues 33, 40, 45, 55, 62 and 63 of SEQ ID NOs:2 or 10.

The paragraph beginning at page 74, line 28, has been amended as follows:

A 45 amino acid residue zamp1 peptide (residues 23 to 67 of SEQ ID NO:[2]10) was synthesized by solid phase peptide synthesis using a model 431A Peptide Synthesizer (Applied Biosystems/Perkin Elmer, Foster City, CA). Fmoc-Lysine(Boc) resin (0.52 mmol/g; Anaspec Inc., San Jose, CA) was used as the initial

support resin. 1 mmol Amino acid cartridges (Anaspec Inc., San Jose, CA and Applied Biosystems/Perkin Elmer, Foster City, CA) were used for synthesis. 2-(1-H-benzotriazol-1-yl)-1,1,3,3-tetramethyuroniumhexafluorophosphate (HBTU), 1-Hydroxy-benzotriazole (HOBt), 2 M N,N-Diisopropylethylamine, N-Methylpyrrolidone, Dichloromethane (all from Applied Biosystems/Perkin Elmer, Foster City, CA), along with piperidine (Aldrich Chemical Co., St. Louis, MO) and 0.5 M acetic anhydride capping solution (Advanced ChemTech, Louisville, KY), were used as synthesis reagents.